

## REMARKS

Claims 10-18 are pending in the present application. None of the claims were amended in this response. Favorable reconsideration is respectfully requested.

Claims 10-18 were rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the enablement requirement. Specifically, the Office Action states that the specification fails to provide sufficient detail regarding the control unit and the acoustic reproduction device such that one having ordinary skill in the art would not be able to make or use the device. Applicant respectfully traverses this rejection.

Any analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention. Any part of the specification can support an enabling disclosure, even a background section that discusses, or even disparages, the subject matter disclosed therein. *Callicrate v. Wadsworth Mfg., Inc.*, 427 F.3d 1361, 77 USPQ2d 1041 (Fed. Cir. 2005) (MPEP 2164.01). If a statement of utility in the specification contains within it a connotation of how to use, and/or the art recognizes that standard modes of administration are known and contemplated, 35 §U.S.C. 112 is satisfied. *In re Johnson*, 282 F.2d 370, 373, 127 USPQ 216, 219 (CCPA 1960) (MPEP 2164.01(c)). To comply with 35 U.S.C. §112, first paragraph, it is not necessary to "enable one of ordinary skill in the art to make and use a perfected, commercially viable embodiment absent a claim limitation to that effect." *CFMT, Inc. v. Yieldup Int'l Corp.*, 349 F.3d 1333, 1338, 68 USPQ2d 1940, 1944 (Fed. Cir. 2003) (MPEP 2164). A patent need not teach, and preferably omits, what is well known in the art. *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991).

The specification, in paragraph [0004] incorporates details on virtual sound sources via the article titled: "An Interactive Virtual-Environment Generator for Psychoacoustic Research, I: Architecture and Implementation" by J. Blauert et al. in *ACUSTICA/Acta Acustica* 86, 2000, pp. 94-102. Also, the article titled: "Binaural Room Scanning - A new Tool for Acoustic and Psychoacoustic Research" by P. Mackensen et al., which appeared in the DAGA 1999 conference report (annual conference of the German acoustics society), describes the movement of a virtual sound source. The present application recognizes that movement of virtual acoustic sources per se is known in the art. One skilled in the art that knows how to move a singular

acoustic source will know how to move a plurality of acoustic sources. However, it is the specific way in which acoustic sources are processed and moved (i.e., in series and simultaneously) which distinguishes the present application from the cited references, and which would be appreciated by those skilled in the art. For at least these reasons, Applicant submits the rejection under 35 U.S.C. §112, first paragraph, is improper and should be withdrawn.

Claims 10-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over *McGrath* (US Patent 6,366,950). Applicant respectfully traverses these rejections.

Specifically, *McGrath* fails to teach or suggest the features of “simulating a movement in a predetermined direction relative to a reference point in the surroundings of an acoustic reproduction device,” and “controlling the acoustic reproduction device using a control unit, wherein said control unit controls the repeated movement of the at least two virtual sound sources in succession from a predetermined starting point to a predetermined ending point, and back again to the starting point, and controlling a direction of movement for the at least two virtual sound sources such that the direction of movement coincides with the direction of the movement to be simulated” as recited in claim 10 and similarly recited in claim 15.

*McGrath* teaches a system and method of increasing the perceived reality of the audio stream of an A/V production, where the method includes the steps of: (a) locating a series of speakers along a periphery of the viewing audience; (b) panning an audio stream between the series of speakers so as to provide for the sense of an audio sound moving along the side of the viewing audience (see Abstract). In FIG. 2, *McGrath* discloses that a series of speakers (10-19) are placed down each side of the cinema audience to provide a larger degree of spatialization of audio tracks around a listener whilst maintaining a degree of “coherence” in the sound registering at the ears of each audience member (col. 2, lines 56-63). Under one embodiment, *McGrath* teaches that a virtual sound 35 is simulated which moves from a left speaker 33 to a right speaker 34 at a constant velocity (i.e., amplitude panning) through three intermediate positions 36, 37, 38 (col. 3, lines 4-17). Under another embodiment, *McGrath* discloses that, not only are the speaker signals panned, but the left/right channel stereo signals from virtual sound source 35 also undergo a varying delay shifting with respect to one another (col. 3, lines 30-39; FIGs. 4-5). The degree of delay is created so that two sounds projected from each speaker 33, 34 can better give

the effect of apparent movement of the virtual sound source 35 for all audience members, not just those located on center.

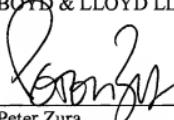
It is clear from the teaching in *McGrath* that the document does not teach or suggest simulating a movement in a predetermined direction relative to a reference point in the surroundings of an acoustic reproduction device. *McGrath* specifically teaches away from using a reference point, as the acoustic field provided by *McGrath* (discussed above), is intended to give different acoustic properties to listeners situated in different locations. Furthermore, *McGrath* only teaches using a singular sound source (e.g., “panning an audio stream” col. 1, lines 50-51; see col. 2, lines 1-2) that is processed to create virtual sound. Again, *McGrath* teaches away from using more than one sound source, as the entire disclosure of *McGrath* is premised upon panning or delaying a singular source to give it the proper spatialization within the listening environment. It follows that *McGrath* also fails to teach or suggest moving the at least two virtual sound sources in succession from a predetermined starting point to a predetermined ending point, and back again to the starting point.

For at least these reasons, Applicant respectfully submits the rejection is improper and should be withdrawn. Accordingly, Applicants respectfully request that a timely Notice of Allowance be issued in this case. If any additional fees are due in connection with this application as a whole, the Examiner is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction is made, please indicate the attorney docket no. (0112740-1068) on the account statement.

Respectfully submitted,

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